

ABSTRACT

The present invention comprises compositions and methods for modulating or augmenting growth factor activity, especially TGF- β activity, by administering a fatty acid. The invention is based upon the discovery that fatty acids, especially those fatty acids having a carbon skeleton of at least 14 carbons, bind to α 2-macroglobulin, prevent binding of TGF- β to α 2-macroglobulin, and disrupt TGF- β - α 2-macroglobulin complexes, which results in an effective increase in TGF- β activity. Fatty acids that bind to α 2-macroglobulin are useful in therapies for diseases that involve TGF- β or other growth factors, which are regulated by α 2-macroglobulin binding.